OIPE
JUN 28 2004
PATENT & TRADEMARK OFFICE

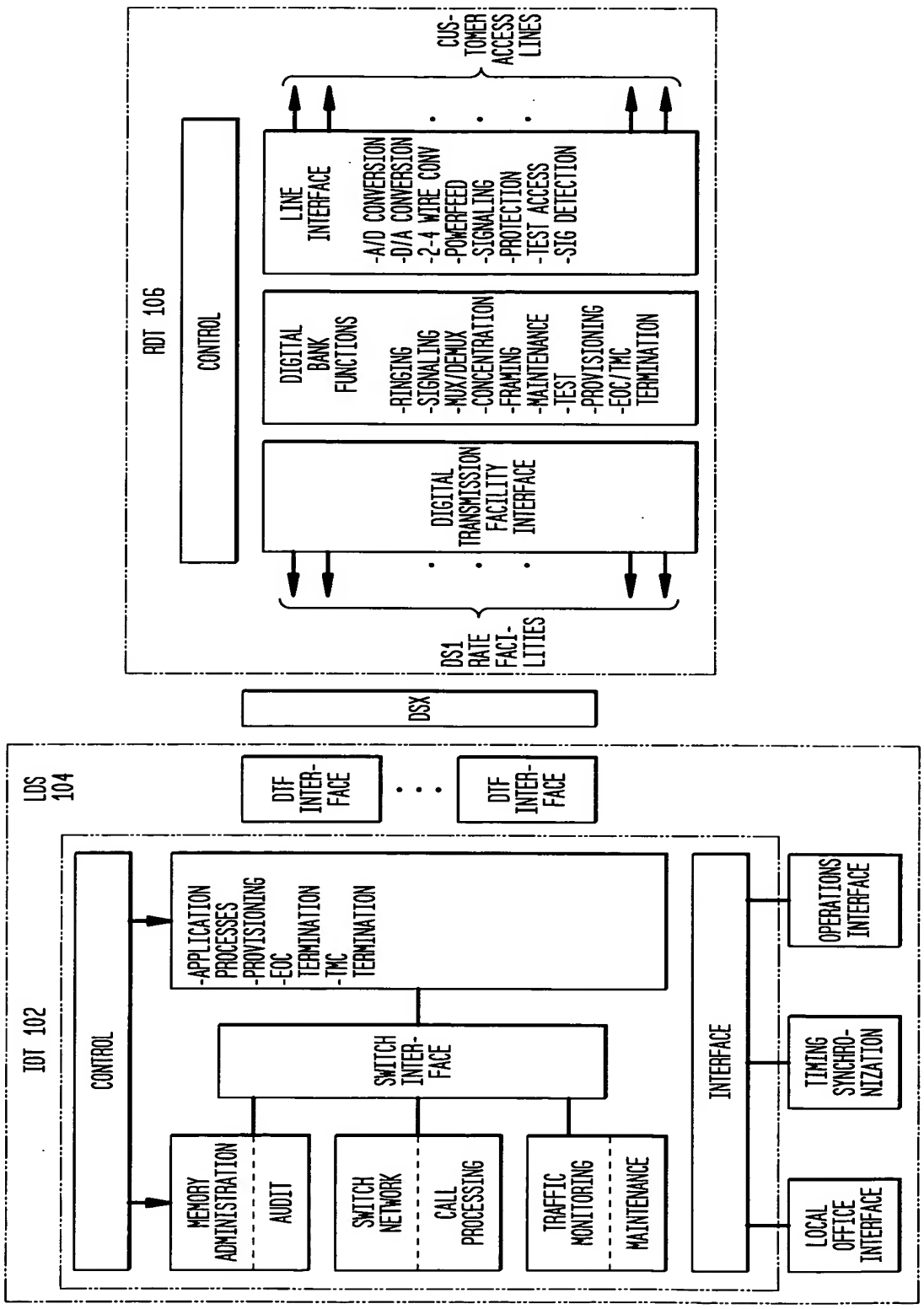


FIG. 1A

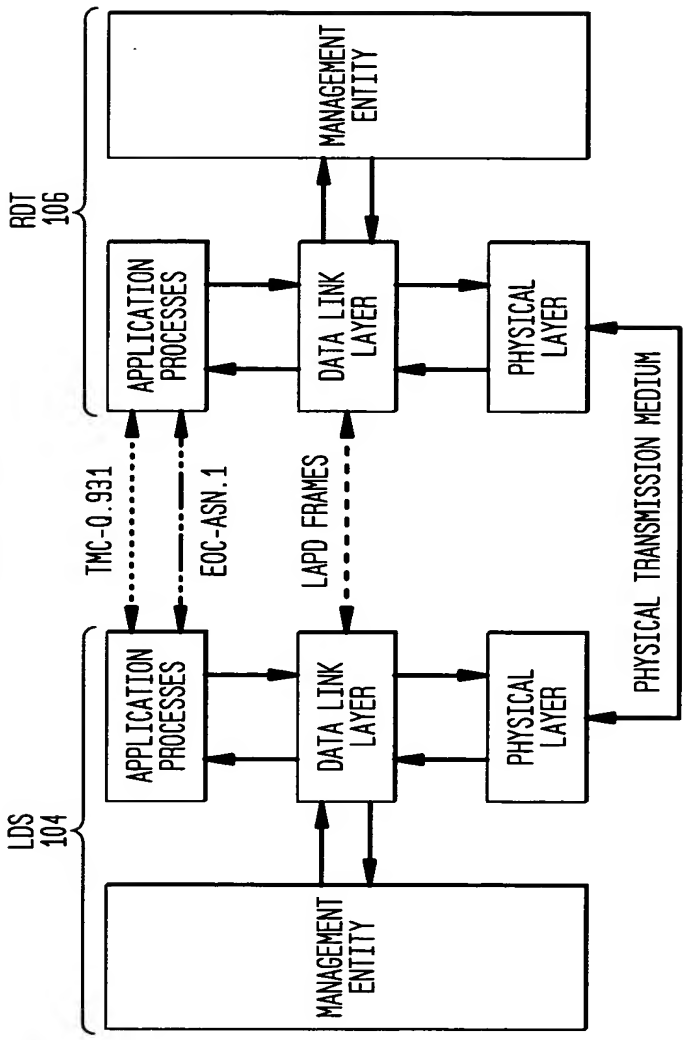

RDT
106
LDS
104
MANAGEMENT ENTITY
APPLICATION PROCESSES
DATA LINK LAYER
PHYSICAL LAYER
TMC-Q.931
EOC-ASN.1
LAPD FRAMES
PHYSICAL TRANSMISSION MEDIUM
APPLICATION PROCESSES
DATA LINK LAYER
PHYSICAL LAYER
MANAGEMENT ENTITY

FIG. 1B

FIG. 2

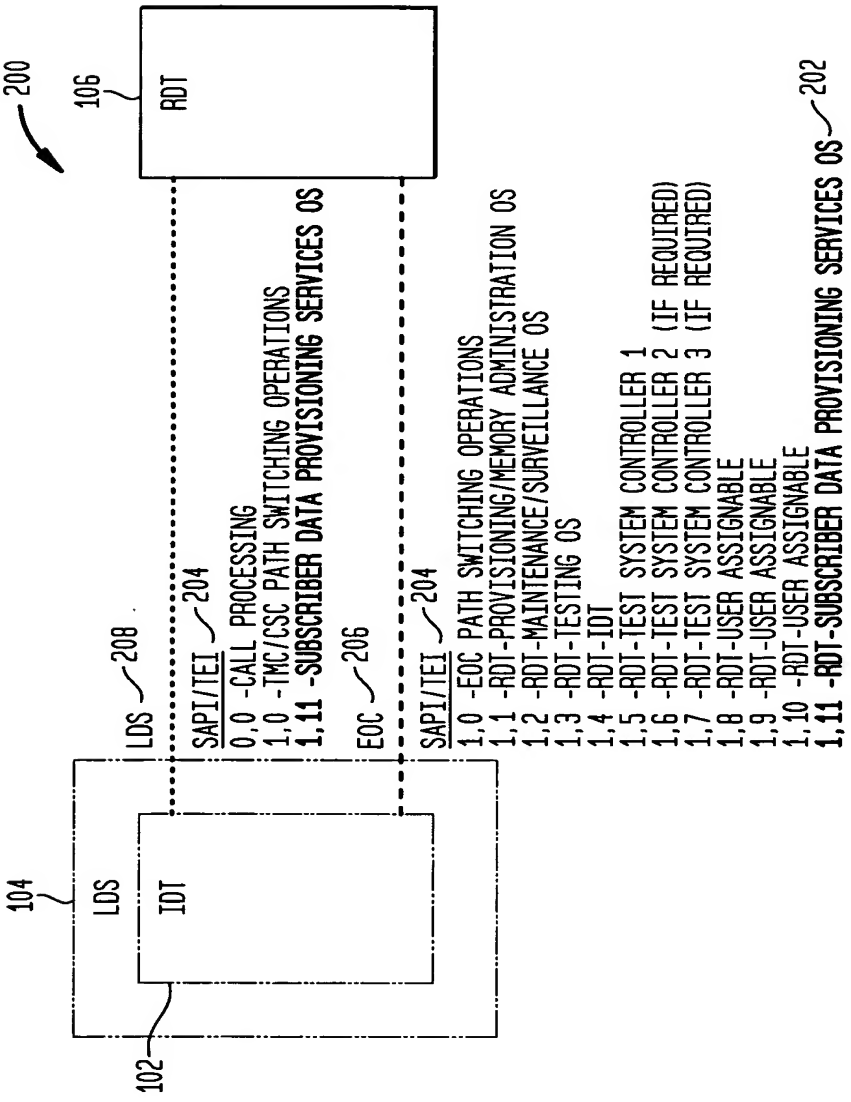

200
106
RDT
LDS
208
SAPI/TEI
204
0,0 -CALL PROCESSING
1,0 -TMC/CSC PATH SWITCHING OPERATIONS
1,11 -SUBSCRIBER DATA PROVISIONING SERVICES OS
EOC
206
SAPI/TEI
204
1,0 -EOC PATH SWITCHING OPERATIONS
1,1 -RDT-PROVISIONING/MEMORY ADMINISTRATION OS
1,2 -RDT-MAINTENANCE/SURVEILLANCE OS
1,3 -RDT-TESTING OS
1,4 -RDT-IDT
1,5 -RDT-TEST SYSTEM CONTROLLER 1
1,6 -RDT-TEST SYSTEM CONTROLLER 2 (IF REQUIRED)
1,7 -RDT-TEST SYSTEM CONTROLLER 3 (IF REQUIRED)
1,8 -RDT-USER ASSIGNABLE
1,9 -RDT-USER ASSIGNABLE
1,10 -RDT-USER ASSIGNABLE
1,11 -RDT-SUBSCRIBER DATA PROVISIONING SERVICES OS
202
104
LDS
IDT
102

FIG. 3A

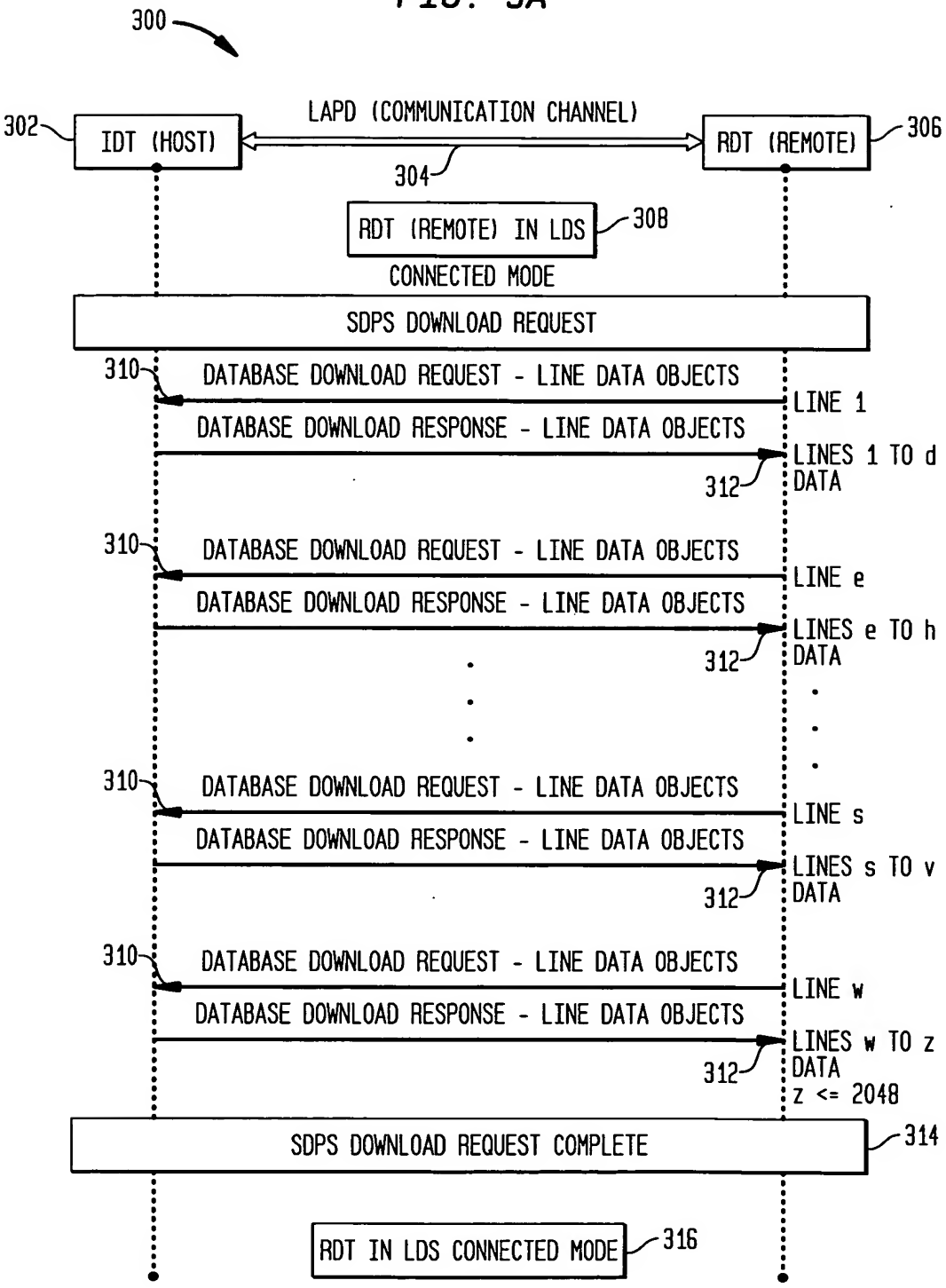

300
LAPD (COMMUNICATION CHANNEL)
302
IDT (HOST)
RDT (REMOTE)
306
304
RDT (REMOTE) IN LDS
308
CONNECTED MODE
SDPS DOWNLOAD REQUEST
310
DATABASE DOWNLOAD REQUEST - LINE DATA OBJECTS
LINE 1
DATABASE DOWNLOAD RESPONSE - LINE DATA OBJECTS
LINES 1 TO d DATA
312
310
DATABASE DOWNLOAD REQUEST - LINE DATA OBJECTS
LINE e
DATABASE DOWNLOAD RESPONSE - LINE DATA OBJECTS
LINES e TO h DATA
312
310
DATABASE DOWNLOAD REQUEST - LINE DATA OBJECTS
LINE s
DATABASE DOWNLOAD RESPONSE - LINE DATA OBJECTS
LINES s TO v DATA
312
310
DATABASE DOWNLOAD REQUEST - LINE DATA OBJECTS
LINE w
DATABASE DOWNLOAD RESPONSE - LINE DATA OBJECTS
LINES w TO z DATA
z <= 2048
312
SDPS DOWNLOAD REQUEST COMPLETE
314
RDT IN LDS CONNECTED MODE
316

FIG. 3B

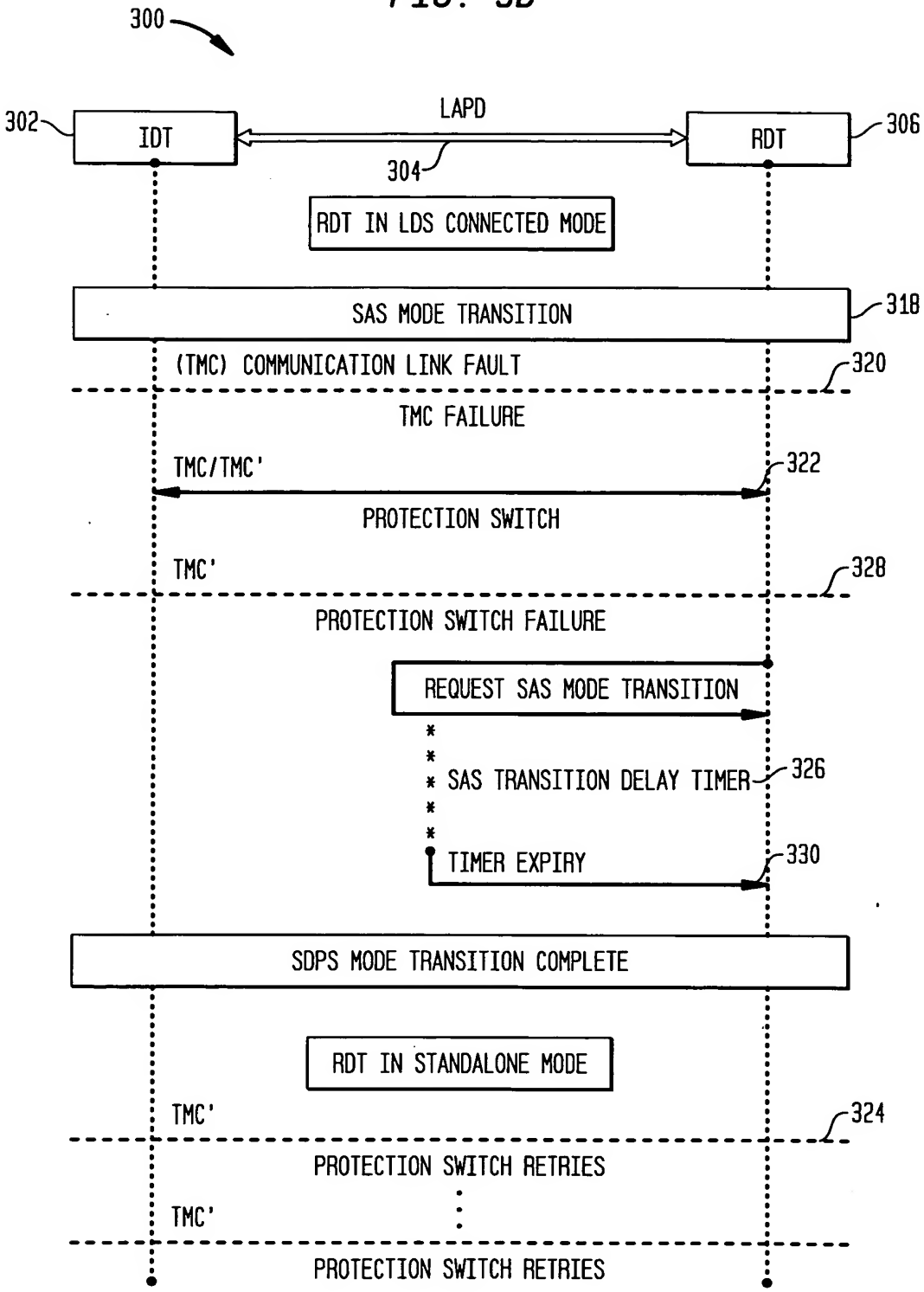

300
302
IDT
LAPD
304
RDT
306
RDT IN LDS CONNECTED MODE
SAS MODE TRANSITION
318
(TMC) COMMUNICATION LINK FAULT
320
TMC FAILURE
TMC/TMC'
322
PROTECTION SWITCH
TMC'
328
PROTECTION SWITCH FAILURE
REQUEST SAS MODE TRANSITION
SAS TRANSITION DELAY TIMER
326
TIMER EXPIRY
330
SDPS MODE TRANSITION COMPLETE
RDT IN STANDALONE MODE
TMC'
324
PROTECTION SWITCH RETRIES
TMC'
PROTECTION SWITCH RETRIES

FIG. 3C

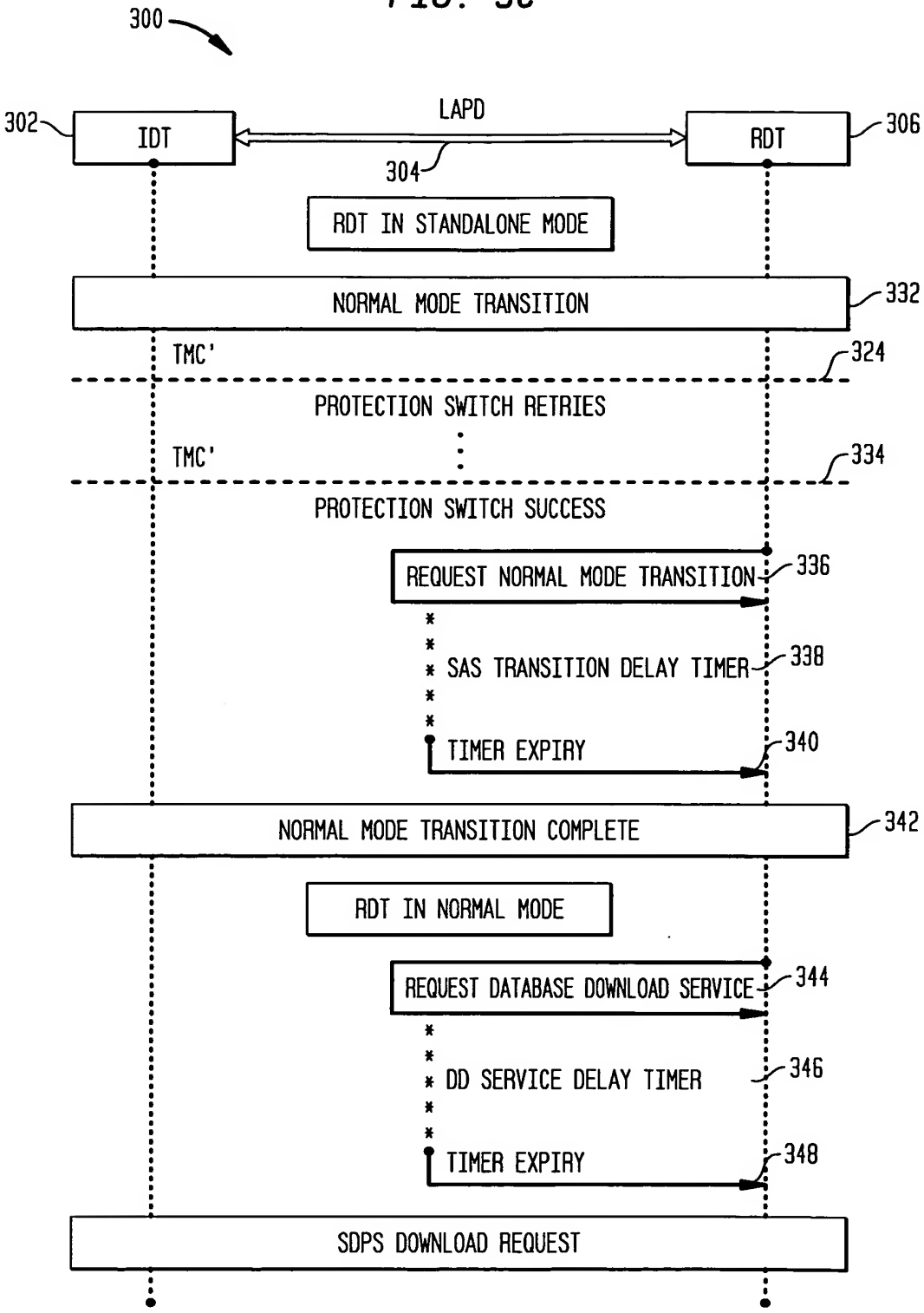

300
302
IDT
LAPD
304
RDT
306
RDT IN STANDALONE MODE
NORMAL MODE TRANSITION
332
TMC'
324
PROTECTION SWITCH RETRIES
TMC'
334
PROTECTION SWITCH SUCCESS
REQUEST NORMAL MODE TRANSITION
336
SAS TRANSITION DELAY TIMER
338
TIMER EXPIRY
340
NORMAL MODE TRANSITION COMPLETE
342
RDT IN NORMAL MODE
REQUEST DATABASE DOWNLOAD SERVICE
344
DD SERVICE DELAY TIMER
346
TIMER EXPIRY
348
SDPS DOWNLOAD REQUEST

FIG. 3D

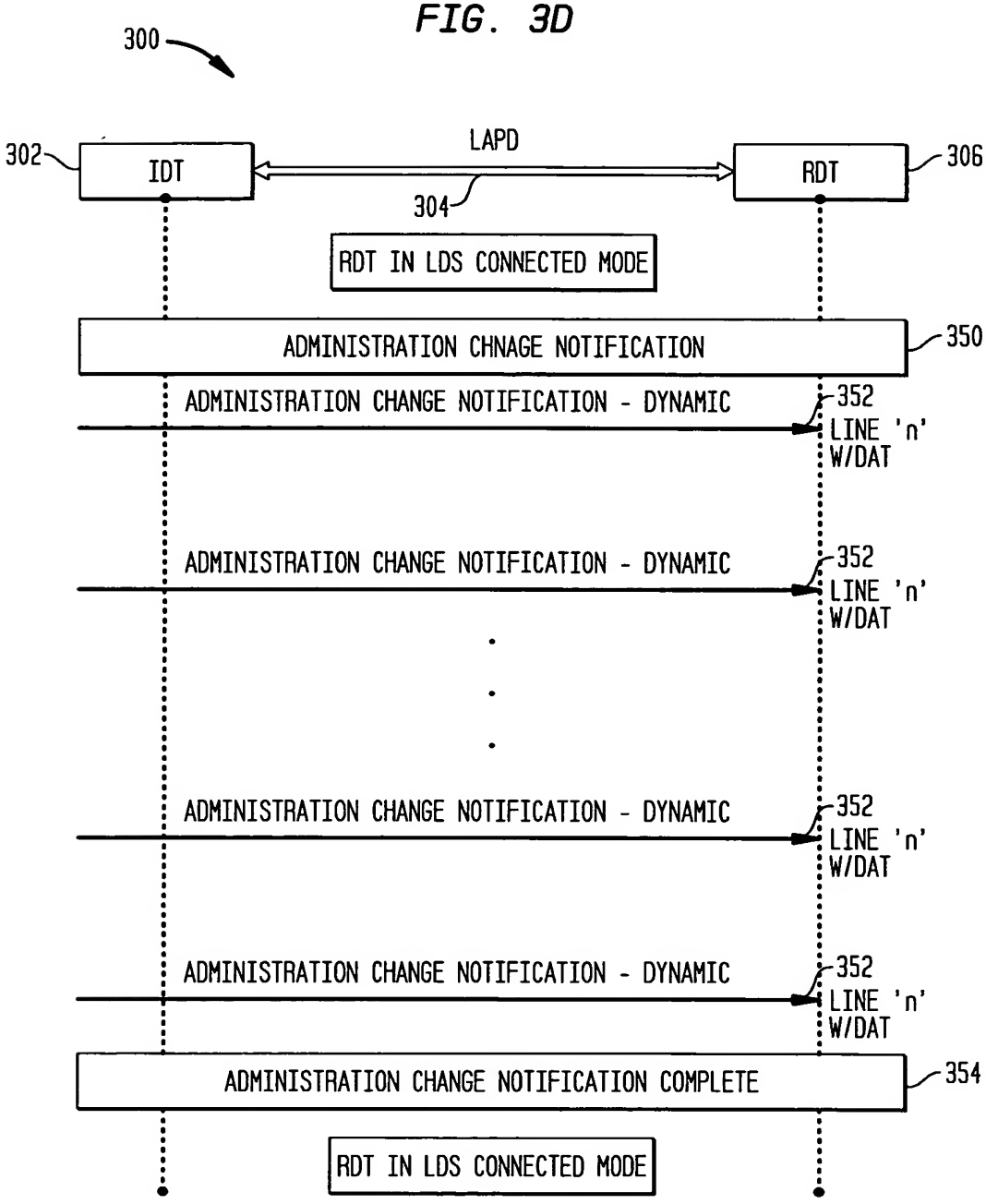

300
302
IDT
LAPD
304
RDT
306
RDT IN LDS CONNECTED MODE
ADMINISTRATION CHNAGE NOTIFICATION
350
ADMINISTRATION CHANGE NOTIFICATION - DYNAMIC
352
LINE 'n' W/DAT
ADMINISTRATION CHANGE NOTIFICATION - DYNAMIC
352
LINE 'n' W/DAT
ADMINISTRATION CHANGE NOTIFICATION - DYNAMIC
352
LINE 'n' W/DAT
ADMINISTRATION CHANGE NOTIFICATION - DYNAMIC
352
LINE 'n' W/DAT
ADMINISTRATION CHANGE NOTIFICATION COMPLETE
354
RDT IN LDS CONNECTED MODE

FIG. 3E

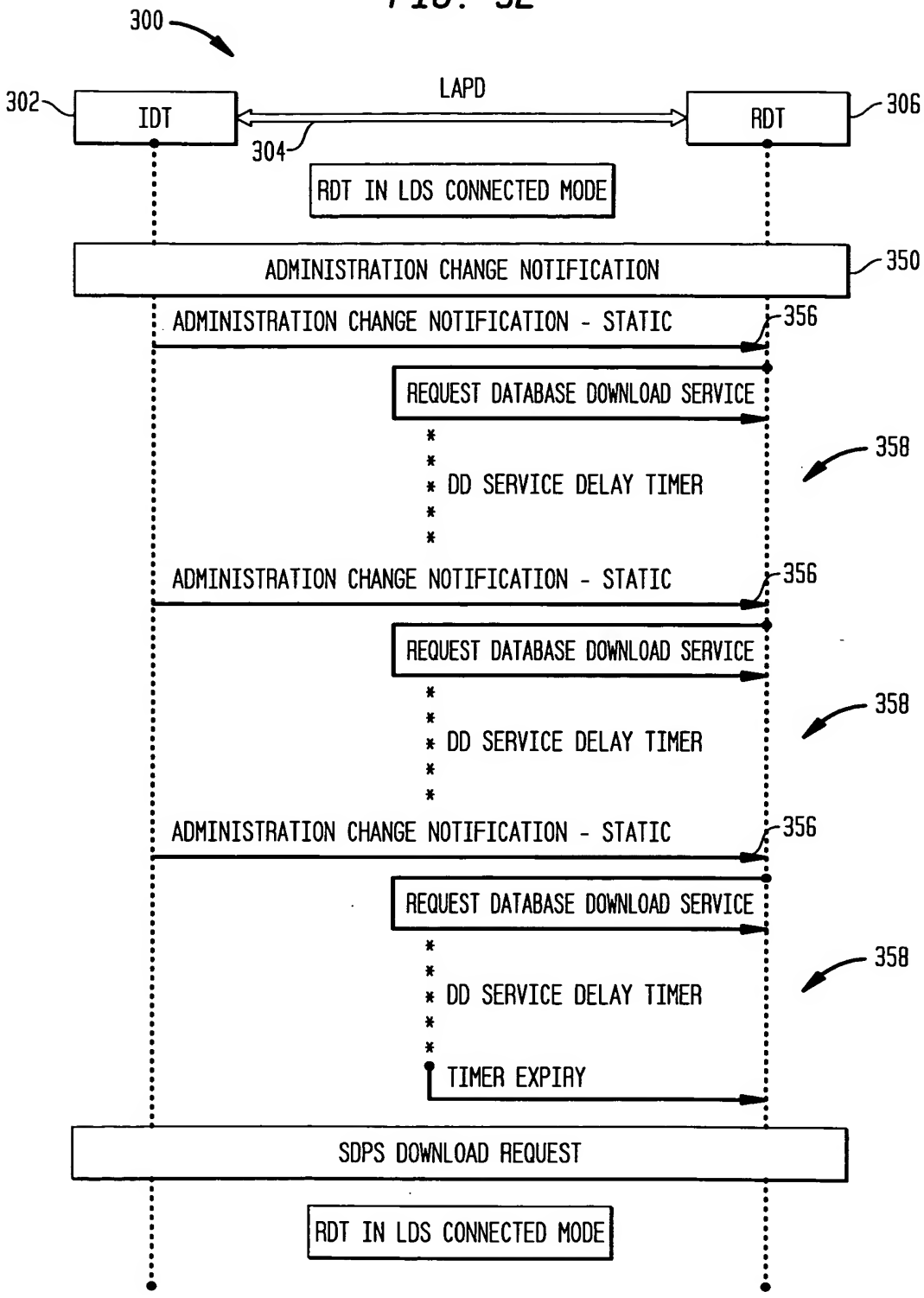

300
302
IDT
LAPD
304
RDT
306
RDT IN LDS CONNECTED MODE
ADMINISTRATION CHANGE NOTIFICATION
350
ADMINISTRATION CHANGE NOTIFICATION - STATIC
356
REQUEST DATABASE DOWNLOAD SERVICE
DD SERVICE DELAY TIMER
358
ADMINISTRATION CHANGE NOTIFICATION - STATIC
356
REQUEST DATABASE DOWNLOAD SERVICE
DD SERVICE DELAY TIMER
358
ADMINISTRATION CHANGE NOTIFICATION - STATIC
356
REQUEST DATABASE DOWNLOAD SERVICE
DD SERVICE DELAY TIMER
358
TIMER EXPIRY
SDPS DOWNLOAD REQUEST
RDT IN LDS CONNECTED MODE

FIG. 3F

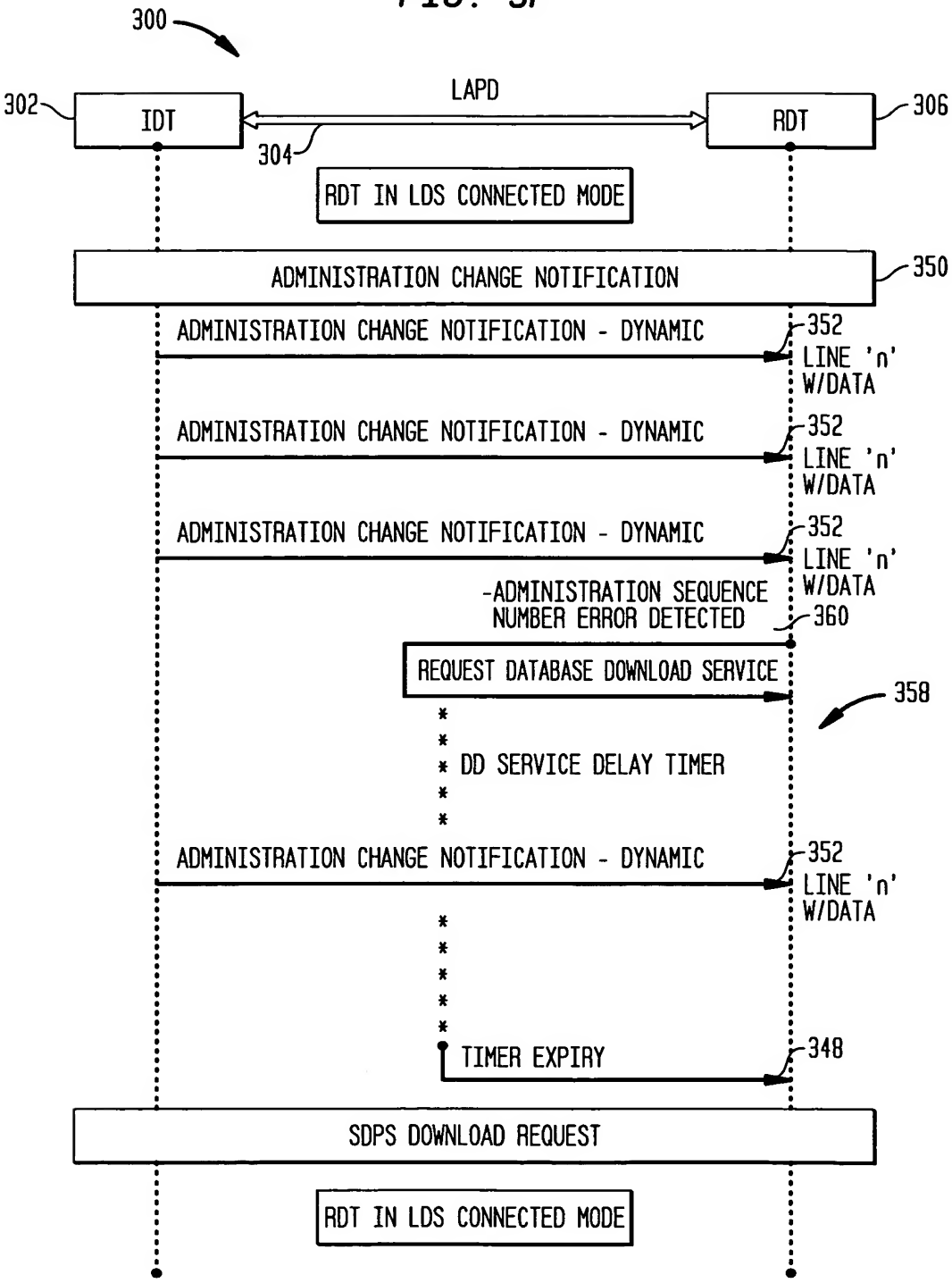
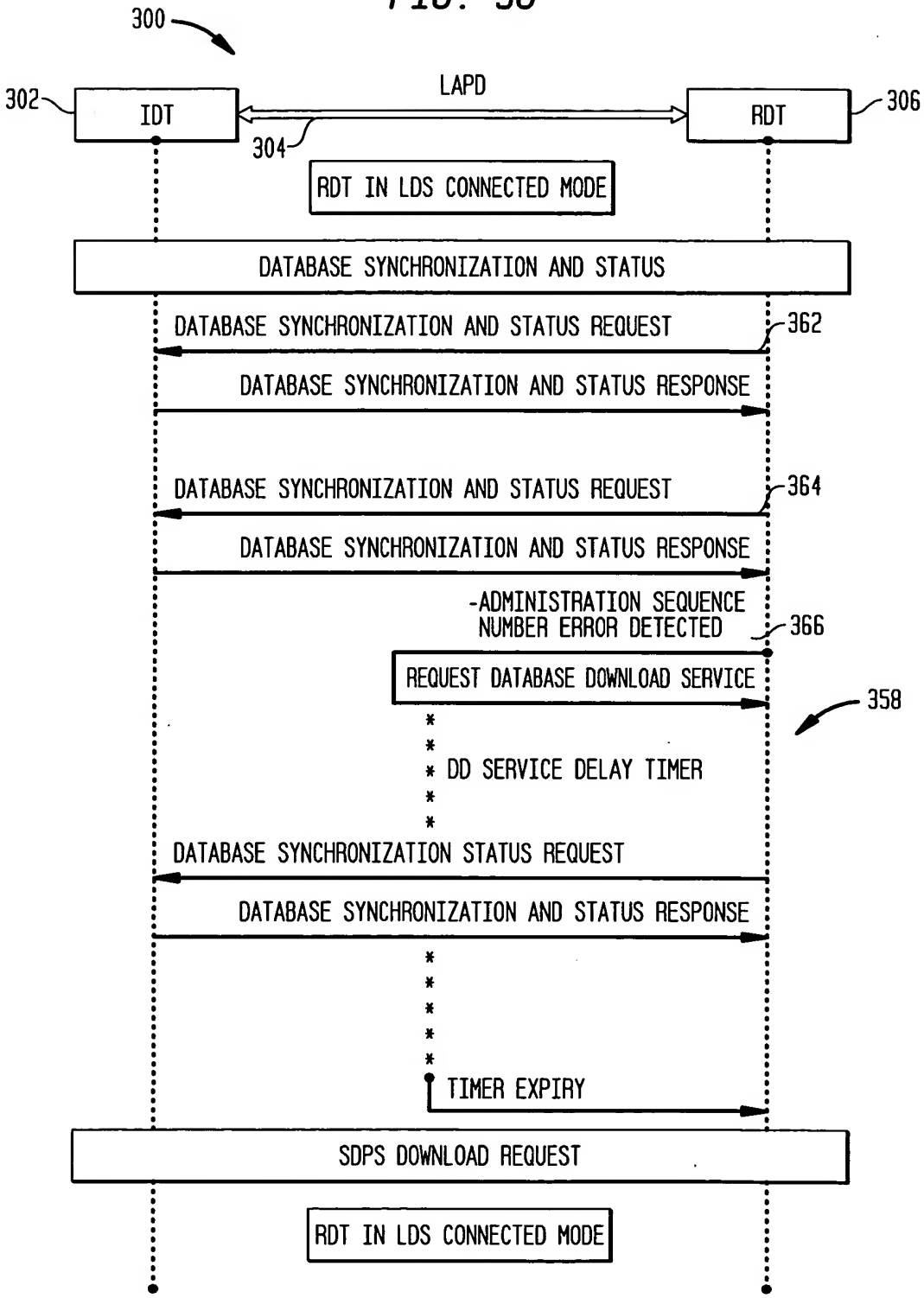

300
302
IDT
LAPD
304
RDT
306
RDT IN LDS CONNECTED MODE
ADMINISTRATION CHANGE NOTIFICATION
350
ADMINISTRATION CHANGE NOTIFICATION - DYNAMIC
352
LINE 'n' W/DATA
ADMINISTRATION CHANGE NOTIFICATION - DYNAMIC
352
LINE 'n' W/DATA
ADMINISTRATION CHANGE NOTIFICATION - DYNAMIC
352
LINE 'n' W/DATA
-ADMINISTRATION SEQUENCE NUMBER ERROR DETECTED
360
REQUEST DATABASE DOWNLOAD SERVICE
358
DD SERVICE DELAY TIMER
ADMINISTRATION CHANGE NOTIFICATION - DYNAMIC
352
LINE 'n' W/DATA
TIMER EXPIRY
348
SDPS DOWNLOAD REQUEST
RDT IN LDS CONNECTED MODE

FIG. 3G


300
302
IDT
LAPD
304
RDT
306
RDT IN LDS CONNECTED MODE
DATABASE SYNCHRONIZATION AND STATUS
DATABASE SYNCHRONIZATION AND STATUS REQUEST
362
DATABASE SYNCHRONIZATION AND STATUS RESPONSE
DATABASE SYNCHRONIZATION AND STATUS REQUEST
364
DATABASE SYNCHRONIZATION AND STATUS RESPONSE
-ADMINISTRATION SEQUENCE NUMBER ERROR DETECTED
366
REQUEST DATABASE DOWNLOAD SERVICE
358
DD SERVICE DELAY TIMER
DATABASE SYNCHRONIZATION STATUS REQUEST
DATABASE SYNCHRONIZATION AND STATUS RESPONSE
TIMER EXPIRY
SDPS DOWNLOAD REQUEST
RDT IN LDS CONNECTED MODE